Remarks

The specification has been amended only to conform the figure designations with the formal drawings filed concurrently herewith. No new matter is added by way of this amendment. Entry thereof is respectfully requested.

Election Regarding Restriction Requirement

In reply to the Office Action dated June 1, 2001, requesting an election of one invention to prosecute in the above-referenced patent application, Applicants hereby provisionally elect to prosecute the invention of Group I, represented by claims 1-6 and 10-13. This election is made without prejudice to or disclaimer of the other claims or inventions disclosed.

This election is made without traverse.

Reconsideration and withdrawal of the Restriction Requirement, and consideration and allowance of all pending claims, are respectfully requested.

Applicants believe that a full and complete reply has been made to the outstanding Restriction Requirement and, as such, the present application is in condition for examination on the merits. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Robert W. Esmond

Robert W. Esmond
Attorney for Applicants
Registration No. 32,893

Date: June 19, 2001

1100 New York Avenue, N.W.
Suite 600
Washington, D.C. 20005-3934
(202) 371-2600

Version with markings to show changes made

In the Specification:

The paragraph bridging pages 7 and 8 of the specification has been amended as follows:

[Fig. 1 depicts] Figs. 1A-1C depict the nucleotide and translated amino acid sequence (Seq ID Nos. 1 and 2) of the AD7c-NTP cDNA. The shaded region corresponds to the nucleic acid sequences detected in 6 AD brains by RT-PCR analysis of mRNA. The cDNA exhibits significant homology with Alu gene, and to an unknown gene in the Huntington region, Chromosome 4q16.3 (underlined). The open reading frame begins with the first methionine codon. The translated amino acid sequence encodes a 41.3 kD protein with a hydrophobic leader sequence (italics) followed by a myristoylation motif (bold, italics) and potential AI cleavage site. That same region (italics, underlined) exhibits significant homology with the insulin/IGF-1 chimeric receptor. There are 17 potential glycogen synthase kinase-3, protein kinase C, or cAMP or Ca-dependent kinase II phosphorylation motifs and one transforming growth factor (tgf) motif (double underlined). The embolded amino acid sequences exhibit significant homology with the A4 alternatively spliced mutant form of NF2, β subunit of integrin, and human decay accelerating factor 2 precursor. The boxed amino acid sequences exhibit significant homology with human integral membrane protein and myelin oligoglycoprotein-16.

The first full paragraph at page 8 of the specification has been amended as follows:

[Figs. 2A-2D] Figs. 2A-2F depict AD7c-NTP expression *in vitro* and *in vivo*. (2A): Recombinant protein detected by *in vitro* translation using sense strand cRNA transcripts. (2B): Western blot analysis of purified recombinant protein demonstrating specific immunoreactivity with the Tag and N3I4 AD7c-NTP monoclonal antibodies, but not with non-relevant FB50 monoclonal antibody. (2C): Western blot analysis of BOSC cells stably transfected with pcDNA3-AD7c-NTP or pcDNA3 (empty vector). The blots were probed with the N3I4 AD7c-NTP antibody. (2D): Significantly increased levels of the 41-45 kD AD7c-NTP protein in AD frontal lobe relative to age-matched control frontal lobe tissue. Similar results were obtained for temporal lobe tissue. (2E): Higher levels of the 41-45 kD and 19-21 kD AD7c-NTP proteins in late, end-stage (L) AD compared with early, less symptomatic (E) AD. All tissue samples were taken from the frontal lobe. Note the clusters of 3 or 4 bands between ~41 and ~45 kD, probably corresponding to different degrees of phosphorylation. (2F): Western blot analysis of postmortem ventricular fluid demonstrating higher levels of the ~41 kD AD7c-NTP molecules in AD compared with aged control samples using the N3I4 antibody. The ~28-30 kD band may represent a degradation product. Also note detection of the ~19-21 kD N3I4-immunoreactive molecules in AD.